

REMARKS

Claims 24-38 are all the claims pending in the application. Claims 1-7 have been cancelled, thereby rendering the prior art rejection moot. However, the newly added claims are distinguished from the prior art of record below, in order to advance prosecution.

I. The Prior Art Rejections

The previous claims stood rejected under 35 U.S.C. §102(b) as being anticipated by Lee et al. and under 35 U.S.C. § 103(a) as being unpatentable over Lee in view of Vu et al. Applicants respectfully traverse these rejections based on the following discussion.

A. The Rejection Based on Lee

The structure disclosed in Lee is most clearly seen in Figure 1f which illustrates a top gate and a bottom gate separated by a channel region, with a continuous oxide separating the gates from the source and drain regions. However, Lee does not teach or suggest many of the features defined by independent claims 24, 29, and 35.

More specifically, because the inventive process uses the sacrificial nitride layers 310, 312, 305 and replaces the sacrificial layers with the upper and lower gates 502, 503, the material selection for the spacers 314, 307 is completely independent of the material selection of the upper and lower gates 502, 503. To the contrary, Lee teaches that the gate sidewalls should be an oxide growth, which requires that the sidewalls comprise an oxidized form of the gate material. Thus, with Lee, the gate sidewall spacers are dependent upon the material of the gate itself and Lee does not teach that "said spacers comprise a material that is independent of the material of said top gate and said bottom gate" as defined by independent claim 24.

Similarly, as shown in Applicants' Figure 11, because the inventive process forms the spacers 307, 1200 that are adjacent to the top gate 502 in separate processing steps, the inventive structure includes distinct upper and lower spacers adjacent the top gate. To the contrary, Lee

only discloses a single continuous oxide spacer adjacent the top gate. Thus, the Lee cannot teach or suggest "said spacers comprise lower spacers adjacent a lower section of said top gate and upper spacers adjacent an upper section of said top gate" as defined by independent claim 29.

Further, because the invention utilizes a self aligned silicide process, the inventive structure includes silicide regions 1300 that are adjacent the point where the upper spacers 1200 and the lower spacers 307 meet. Once again, because Lee teaches a single continuous spacer along the sidewalls of the top gate, it cannot teach or suggest claimed invention where "said silicide regions are adjacent a point where said upper spacers meet said lower spacers" as defined by independent claim 35.

Therefore, as shown above, the applied prior art reference Lee does not teach or suggest the invention defined by independent claims 24, 29, and 35. Therefore, the independent claims (and the dependent claims by their dependency) are patentable over Lee.

B. The Rejection Based on Lee in view of Vu et al.

The Office Action admits that Lee does not provide an explicit teaching of conductors being connected to the gate. Therefore, the Office Action references Vu as teaching this feature. Applicants note that this feature is no longer defined by the claims and that this rejection is therefore moot.

II. Formal Matters and Conclusion

Corrected drawings are being filed herewith. The only change from the previously filed drawings is the inclusion of spacers 307 in Figures 9 and 11. Applicants note that an inadvertent figure copying error occurred between Figure 7 and Figure 9 wherein the spacers 307 were inadvertently excluded from Figure 9. This caused the spacers 307 to also not appear in Figure 11. Applicants submit that the corrections to Figures 9 and 11 are obvious drawing errors that would be recognized by one ordinarily skilled in the art, and do not present new matter.

More specifically, the material surrounding all sides of the spacers 307 does not change between Figure 7 and 9. As can be seen when comparing Figures 7 and 9, the oxide regions 311, 309 and the polysilicon region 502 are not altered between Figures 7 and 9. Therefore, the spacers 307 could not have been altered and clearly should have been included by the draftsman in Figure 9. In addition, the discussion appearing on page 9, line 8-page 10, line 2 is silent regarding any removal process that would affect the spacers 307. Therefore, it would be clear to one ordinarily skilled in the art that spacers 307 should have been included by the draftsman in Figures 9 and 11 and that the corrected drawings being submitted herewith do not add new matter. Similar drawing corrections are being prepared in a Certificate of Correction for parent application which has issued as U.S. patent 6,642,115.

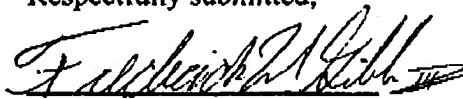
In view of the foregoing, Applicants submit that claims 24-38, all the claims presently pending in the application, are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary.

Please charge any deficiencies and credit any overpayments to Attorney's Deposit Account Number 50-0510.

Respectfully submitted,

Dated: 3/3/04


Frederick W. Gibb, III
Reg. No. 37,629

McGinn & Gibb, P.L.L.C.
2568-A Riva Road
Suite 304
Annapolis, MD 21401
(301) 261-8071
Customer Number: 29154